

**CONFIDENTIAL**

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Downgrading and  
declassification

8 October 1964

Please Reference:  
A51-64-3090

25X1



Gentlemen:

We are pleased to provide the second in a series of Monthly Progress Reports covering the effort expended on subject contract during the period of 1 September to 5 October.

In the area of research we conducted tests to ascertain the optimum diameter of capstans which would require a minimum amount of force to bend film 180 degrees over its surface. The test method utilized consisted of hanging lengths of film of various width and thicknesses over rollers of different diameters and adding weights until the film moved over the roller at an angle of 180 degrees. The results of each test were plotted. In each case, the break in the curve occurred for a diameter of five (5) inches or greater. As a result of these tests all future test capstans will be manufactured with a diameter of six (6) inches.

We began phase one of that portion of the research effort designed to increase the efficiency of the air/liquid bearing type of film processor by designing and starting construction of a test rig which will enable us to measure pressure drops across various standard plastic fittings. These tests will be repeated with stainless steel fittings and a comparison of the test results made to determine which type of fittings is best suited for this application.

Also, design work was started on a permanent test stand for air and liquid bearing and vacuum capstan testing. Manufacture of the stand will be started in the forthcoming reporting period.

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U. S. Government

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25X1 The construction of the clean room has not proceeded to schedule due to a delay in obtaining building permits. Obviously we cannot proceed with the removal of walls, etc. until various required approvals from the local city officials are obtained. The modular components of the room itself are approximately 99% complete. The structural steel framework for the flooring will be drop shipped to us on October 20th. General design of the [ ] unit is finalized, formal approval is held pending their final quotation.

25X Assuming that building permits are obtained by 13 October, we believe that with a little extra effort the clean room area can be prepared in time for the [ ] personnel to begin construction on receipt of the structural flooring members.

Work contemplated for the forthcoming reporting period is as follows:

1. Pressure drop tests on plastic and stainless steel fittings.
2. Completion of permanent test stand design and commencement of its construction.
3. Preliminary design for a six (6) inch capstan to operate on both positive and negative pressures.
4. Commencement of the erection of the clean room.

Funds committed or expended to date are approximately [ ] If you should have any questions or desire further information please do not hesitate to contact us. 25X1

Very truly yours,

25X1

Contract Administrator

MCM:gw

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